IN THE CLAIMS:

Please substitute the following claims for the same numbered claims in the application:

1.   (Currently Amended) A computer implemented system for transferring data over a master driven TDD/TDMA based wireless network characterized in that it operates with minimum delay in end-to-end transmission by including:

means for achieving optimum time slot utilization by minimizing the number of baseband packets created for each Link layer packet, each baseband packet being of a size corresponding to one of a permitted set of capacities 'C1, C2,......Cn', wherein minimizing the number of baseband packets created for said each Link layer packet comprises converting said Link layer packet into as many baseband packets of highest capacity 'Cn' as possible and repeating a conversion process on unconverted bytes using each successive lower capacity baseband packet size until all the unconverted bytes have been converted into said baseband packets; and

means for optimum sharing of bandwidth, higher link utilization and low baseband packet transmission queue occupancy by adaptive scheduling of the transmission of said baseband packets in said queues.

2.   (Currently Amended) A system as claimed in claim 1, wherein said means for minimizing the number of baseband packets created for said each Link layer packet is an SAR-OSU algorithm comprising converting said Link layer packet into as many baseband packets of highest capacity 'Cn' as possible and repeating a conversion process on unconverted bytes using each successive lower capacity baseband packet size until all the unconverted bytes have been

09/680,168   3

~~converted into said baseband packets.~~

3.   (Previously Presented) A system as claimed in claim 1, wherein said master driven TDD/TDMA based wireless network comprises a Bluetooth network and said Link layer packet comprises a L2CAP packet.

4.   (Original) A system as claimed in claim 1, wherein said means for adaptive scheduling of transmission is an 'AP?' algorithm whereby a baseband packet transmission queue with a size greater than a defined threshold is continuously polled for a defined number of transmissions as long as its size remains greater than said defined threshold.

5.   (Previously Presented) A system as claimed in claim 1 further comprising means for increasing the transmission polling interval for a baseband packet transmission queue with low packet traffic when a 'poll' packet is sent instead of a 'data' packet.

6.   (Currently Amended) A computer implemented method for transferring data over a master driven TDD/TDMA based wireless network characterized in that it operates with minimum delay in end-to-end transmission by:

achieving optimum time slot utilization by minimizing the number of baseband packets created for each Link layer packet, each baseband packet being of a size corresponding to one of a permitted set of capacities 'C1, C2,.......Cn', wherein minimizing the number of baseband packets created for said each Link layer packet comprises converting said Link layer packet into

09/680,168   4

as many baseband packets of highest capacity 'Cn' as possible and repeating a conversion process on unconverted bytes using each successive lower capacity baseband packet size until all the unconverted bytes have been converted into said baseband packets; and

maintaining optimum sharing of bandwidth, higher link utilization and low baseband packet transmission queue occupancy by adaptive scheduling of the transmission of said baseband packets in said queues.

7.   (Currently Amended) A method as claimed in claim 6, wherein said minimizing the number of said baseband packets created for said each Link layer packet is by an SAR-OSU algorithm ~~comprising converting said Link layer packet into as many baseband packets of highest capacity Cn as possible and repeating a conversion process on unconverted bytes using each successive lower capacity baseband packet size until all the unconverted bytes have been converted into said baseband packets.~~

8.   (Previously Presented) A method as claimed in claim 6, wherein said master driven TDD/TDMA based wireless network comprises a Bluetooth network and said Link layer packet comprises a L2CAP packet.

9.   (Original) A method as claimed in claim 6, wherein said adaptive scheduling of transmission is by an 'AFP' algorithm whereby a queue with a size greater than a defined threshold is continuously polled for a defined number of transmissions as long as its size remains greater than said defined threshold.

09/680,168   5

10.   (Previously Presented) A method as claimed in claim 6 further comprising increasing the

transmission polling interval for a baseband packet transmission queue with low packet traffic

when a 'poll' packet is sent instead of a 'data' packet.

11   (Currently Amended) A computer program product comprising computer readable

program code stored on computer readable storage medium embodied therein for causing a

computer to transfer data over a master driven TDD/TDMA based wireless network

characterized in that it operates with minimum delay in end-to-end transmission by including:

   a computer readable program code adapted to achieving optimum time slot utilization by

minimizing the number of baseband packets created for each Link layer packet, each baseband

packet being of a size corresponding to one of a permitted set of capacities 'C1, C2,......Cn',

wherein minimizing the number of baseband packets created for said each Link layer packet

comprises converting said Link layer packet into as many baseband packets of highest capacity

'Cn' as possible and repeating a conversion process on unconverted bytes using each successive

lower capacity baseband packet size until all the unconverted bytes have been converted into said

baseband packets; and

   a computer readable program code adapted to implementing optimum sharing of

bandwidth, higher link utilization and low baseband packet queue occupancy by adaptive

scheduling of the transmission of said baseband packets in said queues.

12.   (Currently Amended) A computer program product as claimed in claim 11, wherein said

09/680,168   6

computer readable program code adapted to minimizing the number of baseband packets created

for said each Link layer packet is an SAR-OSU algorithm comprising converting said Link layer

packet into as many baseband packets of highest capacity Cn as possible and repeating a

conversion process on unconverted bytes using each successive lower capacity baseband packet

size until all the unconverted bytes have been converted into said baseband packets.

13.   (Previously Presented) A computer program product as claimed in claim 11, wherein said

master driven TDD/TDMA based wireless network comprises a Bluetooth network, and said

Link layer packet comprises a L2CAP packet.

14.   (Previously Presented) A computer program product as claimed in claim 11, wherein said

computer readable program code adapted to adaptive scheduling for transmission comprises an

'AFP' algorithm whereby a queue with a size greater than a defined threshold is continuously

polled for a defined number of transmissions as long as its size remains greater than the defined

threshold.

15.   (Previously Presented) A computer program product as claimed in claim 11 further

comprising a computer readable program code adapted to increasing the transmission polling

interval for a baseband packet transmission queue with low packet traffic when a 'poll' packet is

sent instead of a 'data' packet.

09/680,168   7